

5HP High Vacuum Dust Collector



Thank You for Choosing an Oneida Air Systems Product!

OAS manufactures and sells dust collection equipment only. Our qualified technicians and sales staff are available 7:30am - 6:00pm EST Mon. - Thurs. and 7:30am - 5:00pm EST Fri. to answer any questions concerning OAS products and dust collection. Call for ductwork design and ductwork quotes, including system pricing and shipping cost.

Read the entire Owner's Manual before installing or operating system!

*Proudly
Made in
the USA*

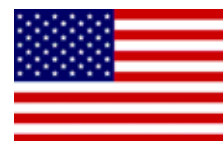


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I. System Start-Up Information

1. Read the installation and maintenance instructions as well as the recommended safety practices in this manual.
2. Install Ductwork completely:
 - (A.) Seal ductwork with silicone sealant or duct tape.
 - (B.) Have Dust Bin in place and sealed.
3. Have licensed electrician wire Fan / Blower according to wire diagram in this owner's manual.
4. Have a licensed electrician check current draw on motor with all gates open. Current draw should not exceed maximum motor amperage. (OAS is not responsible for destroyed motors.)

Caution

The Dust Collector & Fan / Blower is heavy! Handling and installation should always be performed by experienced and trained personnel who have experience with rotary equipment. In addition to the following instructional manual, care should be taken to ensure compliance with specific safety requirements mandated by federal, state and local codes.

Warning

Do not operate Fan / Blower without connecting ductwork. Never operate Fan / Blower without belt shaft guard in place. Keep clear of exhaust. Keep hands and objects clear of inlet and outlet.

Warning

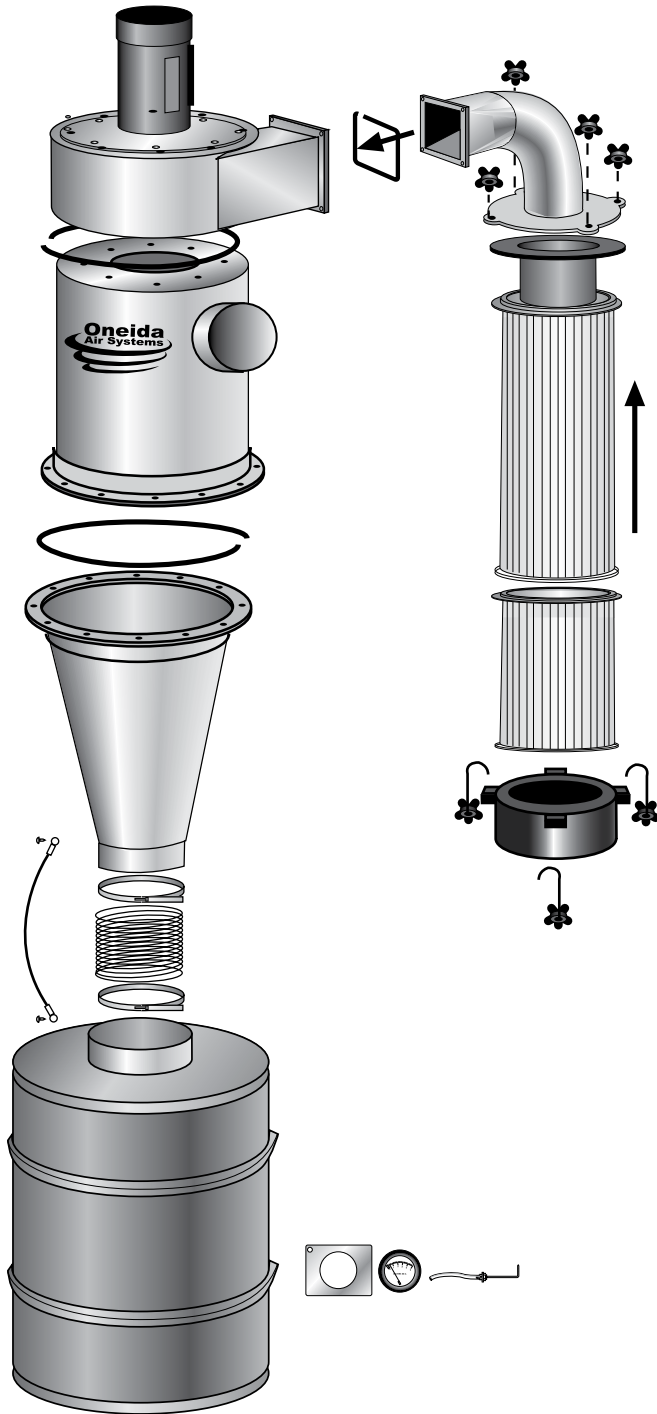
Check amperage draw during operation with all blast gates open. Make certain amperage is not outside operating limit indicated on motor plate! If amperage is too high - shut down immediately! (See Troubleshooting section.)

For Customer Service:

866 - 387 - 8822 or customerservice@oneida-air.com

II. General Assembly

- XXK050133 - 1 Phase / XXK05033 - 3 Phase



- BHX070000 Fan Housing (1)
- FGA000000 Filter Grounding Assembly (1)
- AFB155155 Bolt Flange 5/16 - 18x 1 (8)
- AFB155160 Bolt 5/16 - 24x 1 (1)
- AFL010500 Lockwasher 1/2" (4)
- AFS015100 Bolt Hex Head 3/8 (4)
- AFT000004 Nut Whiz Lock 3/8" (4)
- AFT051618 Nut U Spring 5/16 - 18 (32)
- AFW155160 Washer 5/16 (1)
- AFW170000 Washer Fender 5/16 x 1 1/2 (2)
- AFW190000 Washer Flat 3/8" (8)
- BBS070001 Shaft Spacer (1)
- BMZ050170 Motor 5hp 1 Ph (1)
- BWX165098 Fan Wheel (1)
- AMR221721 Magnetic Starter (1)
- RMP000000 Motor Plate (1)
- SXX000068 Stand 68" leg set (1)
- SXX000023 Stand 23" leg set (1)
- SEX551000 Drum Lid 10" inlet (1)
- FPX010500 Plenum Assembly (1)
- FXX000000 Filter Efficiency Gauge (1)
- FGA000001 Grounding Cable 14" (1)
- AFB155190 Bolt Hex Head 5/16 - 18 x 1" (12)
- AFT155175 Nut Whiz Lock 5/16 (12)
- RGZ000000 Gasket Neoprene (25')
- FPZ000018 Dust Bin 18"(1)
- AFT000001 Thumb Nut 5/16"x 18 (8)
- AFJ051602 Bolt J 5/16 - 18x 2" (8)
- AFS013000 Screws self-tapping 3/8 (2)
- AFB155155 Bolt Flange 5/16 - 18x 1" (16)
- AFW180000 Washer Flat 5/16" (44)
- BSC180000 Filter Silencer (1)
- SES550000 Drum Steel 55 gal. incld. clamps (1)
- ACB120000 Clamp Band 12" (2)
- FCS183900 Filter Cartridge 18"x 39" (1)
- FCS182000 Filter Cartridge 18"x 19.5" (1)
- AHX186200 Filter Hardware Kit (1)
- DHF100000 Flex Hose 10" Dia (1 ft.)
- SCX002309 Cyclone Cone (1)
- BXI050100 Blower Unit (1)
- SXI050000 Cyclone Barrel (1)

III. General Specifications & Fan Performance Curves

Physical and Electrical Data for 5hp High Vacuum Unit.

System Performance

5hp - 2150 max cfm @ 2" SP w/ Filter

System Dimensions

Height w/ 55 Gal. Drum: Approx. 110 1/8"

Footprint: Approx. 56" x 34"

Fan Wheel Diameter: 16" Backward Incline Design

Cyclone Inlet: 8"

Dust Bin

55 Gal. Steel Drum

Large Dust Bins available

Included

Magnetic Motor Starter

Filter Efficiency Gauge

Stand

Filter Grounding Wire

Integral Fan Blower - 5hp

TEFC 60 Hz Motor - Single Phase TEFC 60 Hz Motor - Three Phase

Insulation Class: F4

Insulation Class: F4

Voltage: 230

Voltage: 208 - 230/460

Amperage: 19.5

Amperage: 13.2 - 12/6

Made in U.S.A.

Made in U.S.A.

External Cartridge Filter

2 Pleated Cartridge - 155 Sq. Ft.

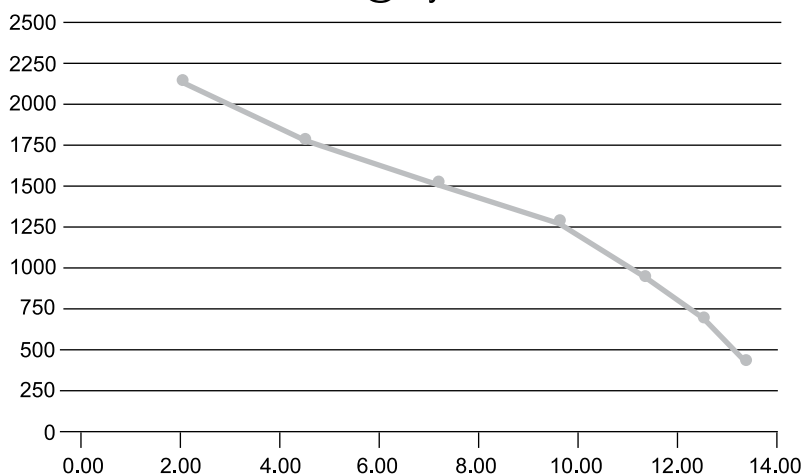
Spun-Bonded polyester BIA ZH1/487 test - Rated C

Captures 99.99% of test material over 20 microns

Captures 99.9% of test material between 0.2 - 2 microns @ 11 fpm

5hp Fan Performance Curve

Pressure vs. Volume @ Cyclone Inlet



Static pressure and volume together determine a fan's performance. Several factors, such as layout of ductwork and diameter of openings, can affect a fan's performance.

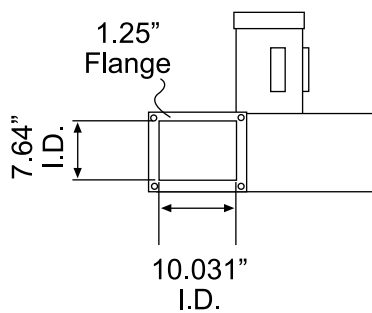
IV. Dimensions

For Twin 55 Gal. Barrel Measurements, See Pg. 9

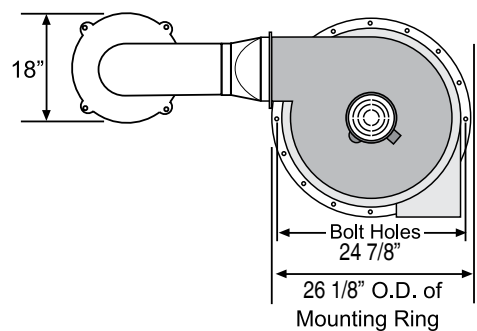
For minimum mounting
heights with 55 gal. drum



Outlet Size

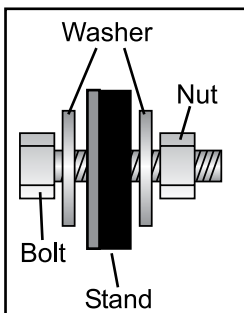
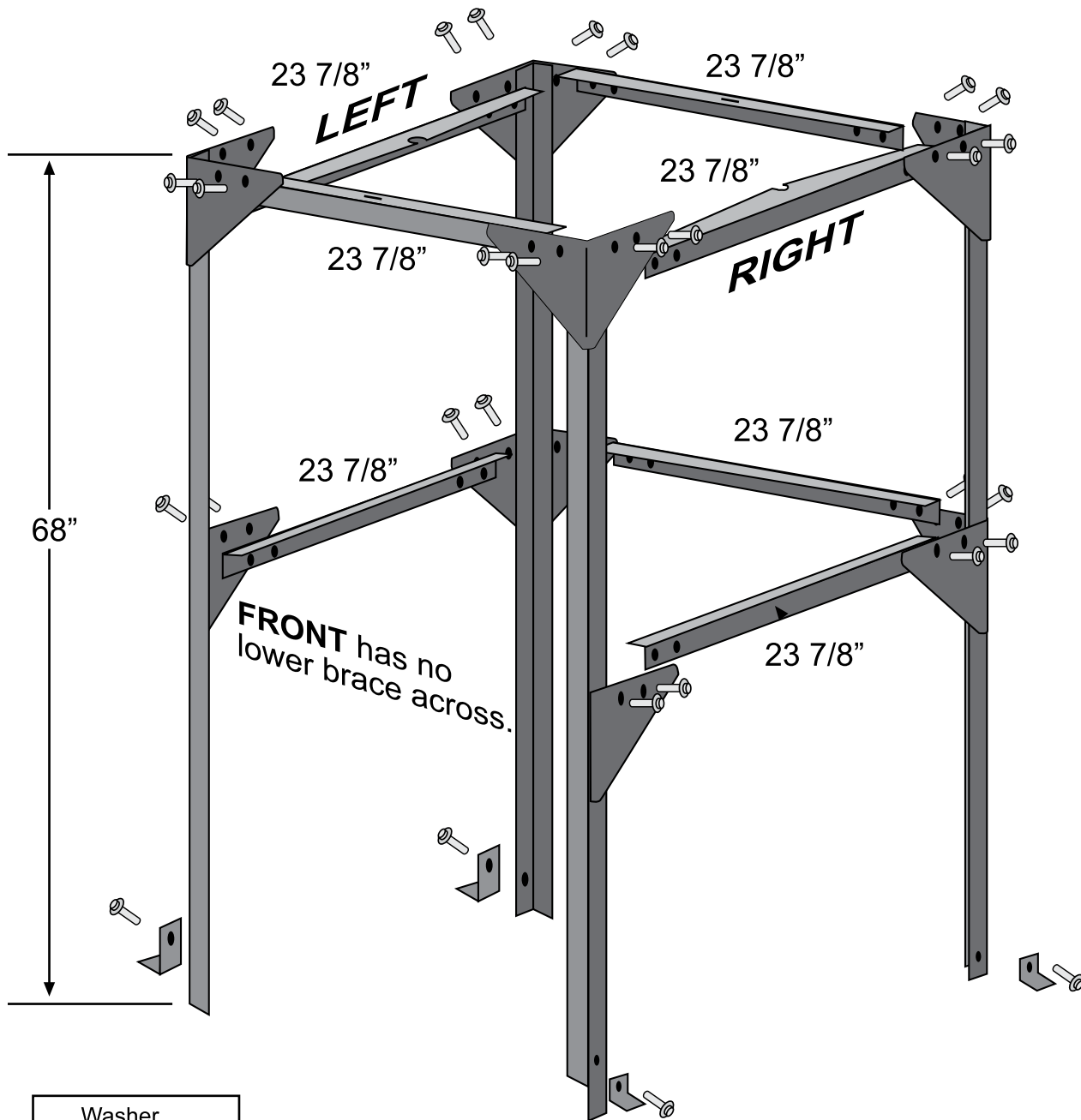


Top View



V. Angle Iron Stand

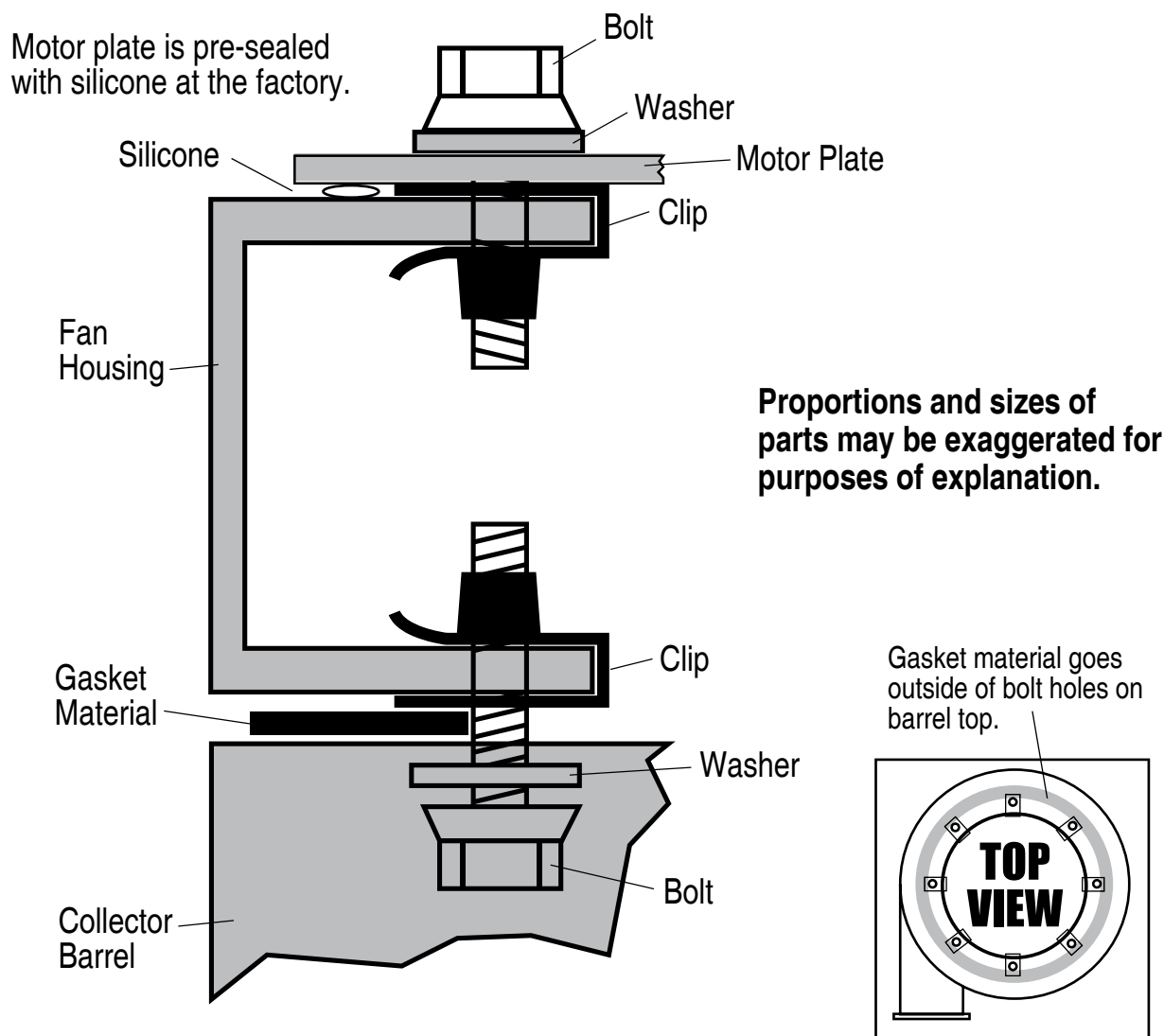
(32) 5/16 Bolts
(32) 5/16 Nuts
(64) 5/16 Flat Washe



VI. Assembly Instructions

Instructions for assembly of Fan Blower Housing and Barrel

1. Stick gasket material around top of barrel, outside of bolt circle, making sure of a complete seal. Dust collection systems cannot operate effectively without being tightly sealed with no air leaks.
2. Put bolt through washer, then into appropriate bolt hole in Fan Housing and Barrel. Tighten bolts so they are all snug, then go back and finish tightening bolts in a star pattern.

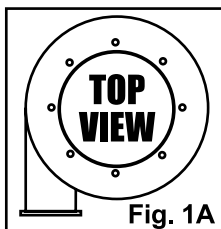


VI. General Assembly Instructions Do NOT use hook on motor to lift unit.

There are essentially three ways to assemble your collector and to attach it to the stand. The way that is right for you should be determined by expertise and manpower available. When the units are all assembled they are very heavy and top weighted. All of this should be taken into account before deciding on the method best suited for you.

With all assemblies, make sure rectangular air outlet is oriented on Fan/Blower housing as you are looking down as in Fig. 1A or facing it as shown in diagrams. This is very important.

Then you can rotate the housing to whatever bolt position is best for your shop.



Before you start, make sure you have cut and placed the provided gasket material on top of the barrel. Then determine which direction you want your filter to hang and which direction your ductwork will enter the collector.

Method #1 -

Bolt Fan / Blower housing to Cyclone barrel, Then bolt Motor and Plate to Fan/Blower housing. Carefully lay unit on its side and then bolt cone to barrel. Lift entire unit up onto stand. Unit is extremely heavy and top weighted, be advised!

Method #2 -

Bolt Fan / Blower housing to Cyclone barrel, Then bolt Motor and Plate to Fan/Blower housing. Put Cone up on stand and orient holes. Lift assembled unit onto cone making sure proper holes are lined up. Bolt unit to stand, then finish bolting barrel to cone.

Method #3 -

Bolt Fan / Blower housing to Cyclone barrel, Put Cone up on stand and orient holes. Lift assembled unit onto cone making sure proper holes are lined up. Bolt unit to stand, then finish bolting barrel to cone. Lift Motor & Plate onto Fan/Blower housing and bolt together in proper direction.

Attach flex hose to bottom of collector and to lid of dust bin. Securely fasten hose clamps. There must be an air tight seal between the collector and dust bin.

Make sure the dust bin lid sits securely and the rubber gasket on the bin lid is in place on the barrel. Maintain an air tight seal between cyclone and dust bin to prevent motor from overloading.

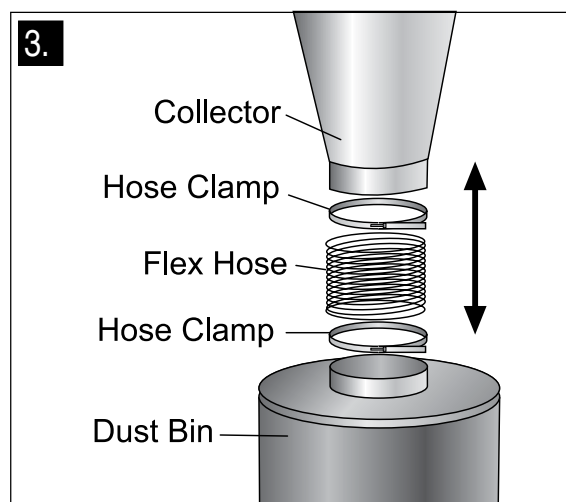
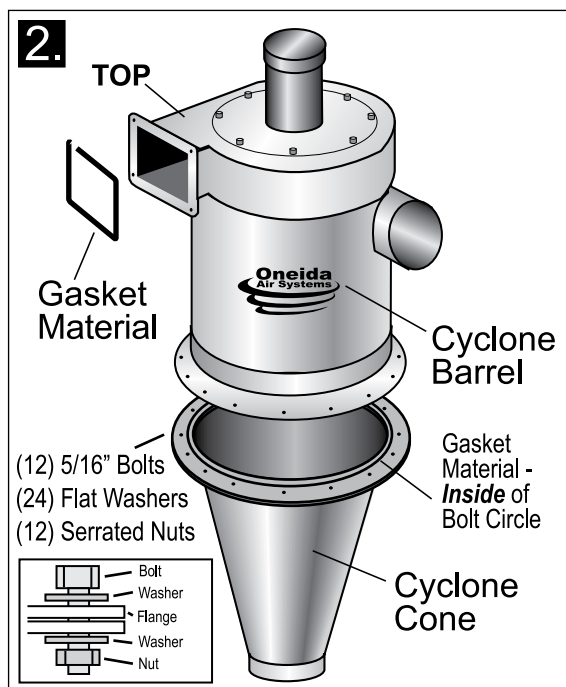
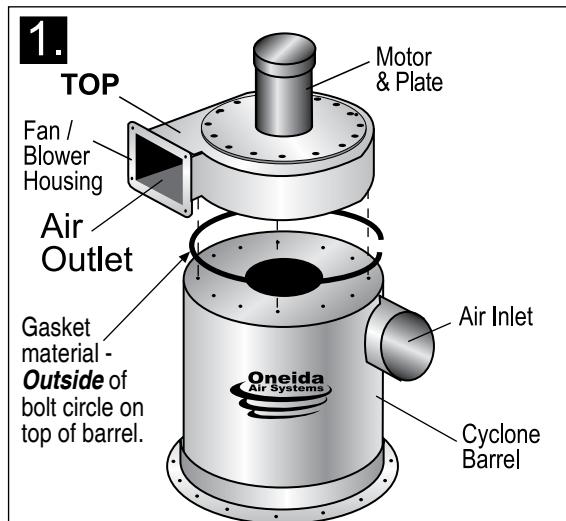
Important!

Do not operate the collector until the dust bin is in place and connector is air tight or motor damage could result! Stay clear of fan exhaust while collector is operating.

Attach the ductwork from the woodworking machines to the inlet of the collector.

Bolt Stand to the floor. Unit is top heavy!

Unit is very heavy and top weighted. Make sure you have adequate help to assemble and lift the unit. Serious injury or damage could occur otherwise.



See next page for further instructions on attaching cone to drum with flex hose.

Flex Hose Connection Cone to Drum

Distance between drum lid and cone can vary. Some systems have little space there to minimize overall system height. The hose is used to seal between the drum and system and needs only enough height to allow the lid of the drum to come off. In some cases the flex hose will have to be cut down (especially with stands or when mounting the system as low as possible). OAS ships 1' of hose as standard but this is not necessarily the needed length once the system is installed.

Tools needed to shorten hose: razor knife and diagonal cutters.

Measure length between drum lid and collar of cone. Measure hose while it is extended (don't overly compress the hose).

This allows the lid to move up when installed. Cut the hose with razor knife and then cut the wire with diagonal cutters

Don't cut too short... if in doubt, cut a little long. Trim if necessary.

VII. Fan / Blower Maintenance

- A high pressure blower requires a certain amount of resistance which will prevent motor over amperage.
- Make sure power source matches wire voltage configurations.
- Check set screw and key in fan wheel, make sure fan wheel is secure. Fan blower should not vibrate.

1. Electrical - Failure to follow instructions and safe electrical procedures could result in serious injury or death. Disconnect all power and discharge all capacitors before servicing. Install and ground per local and national codes. Consult a licensed electrician with questions or if repairs are required.

Electrical Connections_

A.) All wiring, fusing, and grounding must comply with National Electrical Codes and local codes.

B.) To determine proper rotation and voltage connections, refer to the wire diagram of this manual.

C.) Use the proper size of line current protection and motor controls as required by the National Electrical Code and local codes. Recommended use is 125% of full load amps as shown on the nameplate for motors with 40 degrees celsius ambient and a service factor over 1.0. Recommended use is 115% of full load amps as shown on nameplate for all other motors. Do not use protection with larger capacities than recommended. Three phase motors must have all three phases protected.

2. Cleanliness - Keep both the interior and exterior of the motor free from dirt, water, oil, and grease.

3. Safety- Motors should be installed, protected and fused in accordance with the latest issue of National Electrical Code, NEMA Standard Publication No. 2 MG 2 and local codes. Rotating parts such as pulleys, coupling, external fans, and unusual shaft extensions should be permanently guarded. Keep hands and clothing away from moving parts. Electrical repairs should be made by trained, qualified personnel only.

4. Service - Notice - If lubrication instructions are shown on the motor nameplate, they will supercede this general instruction.

Warning! Rotating Fan Blades. Keep Objects Clear of Inlet and Outlet!

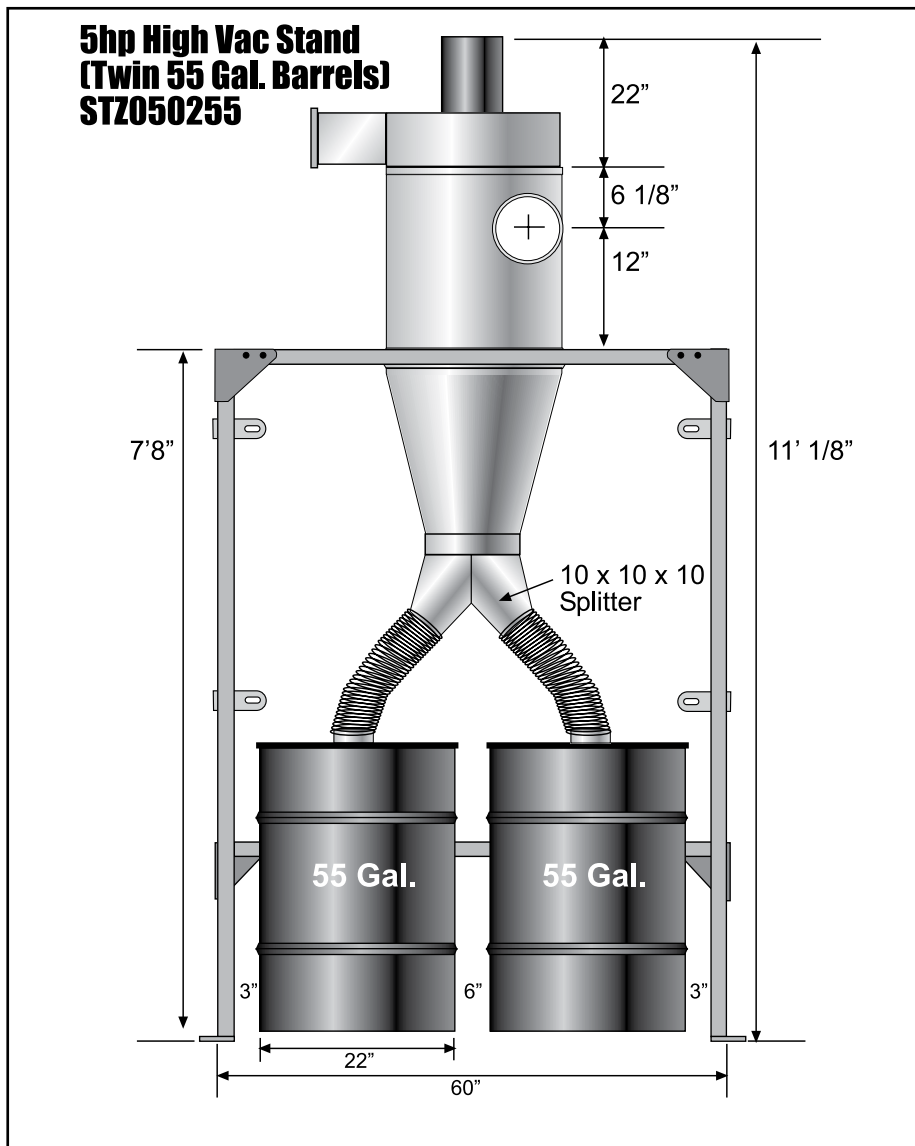
VIII. Filter Maintenance

External Filter Cartridge Cleaning Intervals

When unit is turned off, use compressed air to blow dust off of pleats from the exterior of filter. Hold nozzle at least 6" away from filter pleats*. Do not remove bottom dust pan before or during the blow-off process! Let dust settle into dust pan. Unclip and dump out dust. Filter removal is not required. You can also run your fingers around the filter pleats to knock material down.

* Warning: A close, direct blast with the compressed air nozzle too close to filter, may damage filter media. Always wear safety glasses while blowing off filter.

Caution! Fine dust collected in filter is hazardous to your health! Do not breathe!



IX. Single and Three Phase Wire Diagram



Use wiring diagram on motor plate if different from below.

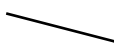

Wiring should always be done by a licensed electrician!

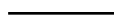
- Electrically insulate all connections.
- For counter-clockwise rotation, looking from top of motor down.

5hp Single Phase

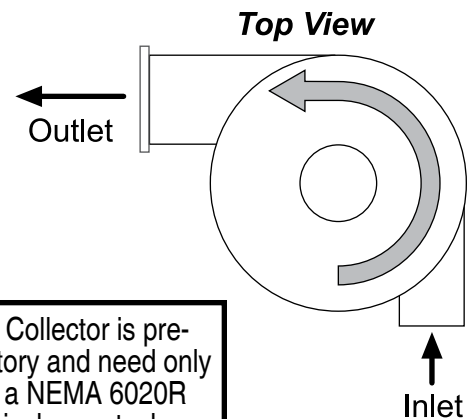
Baldor Motor / 230v / 19.5 amps / TEFC / C Face / 3450 rpm

1 - Blue  Power Line 1*
8 - Red 

J - Brown 
5 - Black  Tie together and insulate with a wire nut (Do NOT connect to any house wiring)

4 - Yellow  Power Line 2*

*Power Line 1 & 2 are interchangeable



Note: This Dust Collector is pre-wired at the factory and need only be plugged into a NEMA 6020R dedicated electrical receptacle. 3hp single phase only.

5hp Three Phase

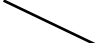
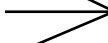

Baldor Motor / 208 - 230/460v / 13 - 12/6 amps / TEFC / C Face / 3450 rpm

208 / 230 Volts

L1 ___ 1 & 7

L2 ___ 2 & 8

L3 ___ 3 & 9

4 
5 
6  Tie Together

460 Volts

L1 ___ 1

L2 ___ 2

L3 ___ 3

7 & 4 ___ Tie Together

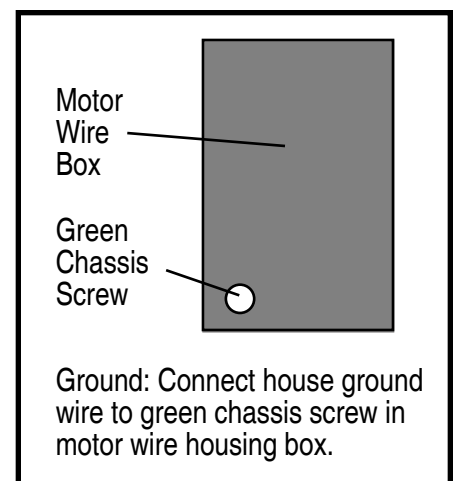
8 & 5 ___ Tie Together

9 & 6 ___ Tie Together

To reverse rotation interchange any two line leads.

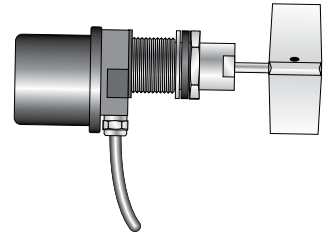
Check rotation after wiring.
Wire for counter-clockwise rotation.

5hp Systems require a 30 Amp breaker.



X. Accessories

Bin Level Monitor - Provides level sensing for dry bulk solids. The monitor operates by using a 1 rpm synchronous motor to rotate a paddle. When paddle rotation is impeded by material surrounding it, the motor is de-energized and triggers a SPDT snap switch. The snap switch can be used in conjunction with a motor starter to turn equipment off or provide alarm functions.



Drum Liner - Plastic Bag Hold-Down

Enables you to line your dust drum with a plastic bag for easy, safe dust disposal.

ABX000035 35 Gal. Hold-Down

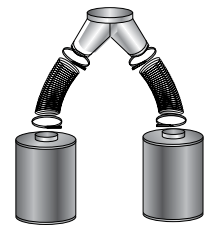
ABX000055 55 Gal. Hold-Down



Dust Bin Options - (Must order custom mounting stand.)

1. Multiple Drums -

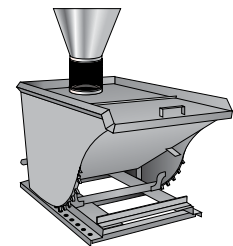
Custom order the System Mounting Stand for multiple drums or hoppers. Stand widths will vary depending on dust container.



2. Hoppers -

Large capacity hoppers from .5 cu. yd. to 3 cu. yd.

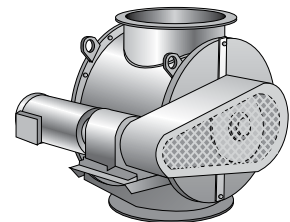
3/15" reinforcing angle for added support - 3/16" plate body is 100% continuously MIG welded on inside - 3/8" rear cross brace angle (not 3/16") - three 3" base channel - All angles are structural not formed.



3. Air Locks -

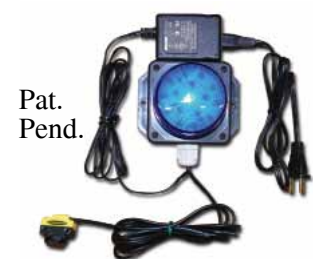
Rotary air locks provide an alternative to an air tight dust bin for larger volume capacity and less maintenance.

Example - A 10" air lock will drop 1.85 cu. ft. / rev. of material.



Dust Sentry™ AXB999110

The Oneida Dust Sentry™ with adjustable IST (Infrared Sensing Technology), flashes a strobe light to alert you when the dust in your container reaches your preset level, telling you when it's time to empty the container.



XI. Troubleshooting

Motor Overheating

The motor's internal circuit breaker will trip if the motor is overheating.

Motor amperage too high - Shut system down.

Caused By:

- System should be completely bolted and sealed together.
- Ductwork should be completely installed and sealed with sealant.
- Air leaks between the collector and dust bin.
 - The lid of the dust bin and the cyclone must be in place and sealed when operating the dust collector.
 - Make sure flex hose is not torn and the hose clamps are tight.
 - Check drum lid; cover should have a foam seal and be well seated.
 - Check for holes or leaks in the dust bin barrel.
- Motor not properly wired. Check wire connections.
 - Check motor rotation - See wire diagram
- Check breaker box. Make sure incoming power supply matches motor specifications.

Note: If you continue to experience difficulty with your collector, call Oneida Air Systems at 1.800.732.4065 for assistance.

Poor Dust Pick-Up at Woodworking Machines

Caused By:

Improper motor rotation - Running backwards will reduce suction by 30%.

- Check length of duct runs and duct diameters compared to ductwork design guideline.
- Make sure all ductwork is sealed. Large air losses will occur even through small cracks in the ductwork. Use silicone, duct tape or duct mastic compound as a sealant.
- Check for air leaks between collector and dust bin.
- Close all unused blast gates at your woodworking machines.
- Examine hood design for weaknesses according to the ductwork guide.
- Check for a restricted pipe, too small a hood port or too small a branch line. See branch line diameter chart in ductwork guide.
- Be sure that your filter is clean. See filter cleaning directions.

Filter Clogging

Caused By:

- Air leakage between cyclone and dust bin. Cyclone and dust bin must be air tight. Even small leaks can will cause poor pre-separation in the cyclone.
- Large chips clogging the filter:
 - Check for a leak in the dust bin, flex coupling or lid. Check for split or torn flex coupling. (See also: Motor Overheating Section above.)
 - Make sure dust bin has not over filled. Dust bin should be emptied before dust reaches top of container.
 - Interruption of air flow, such as vacuuming chips with a flex hose connection, will increase filter maintenance.
 - Minimum 4" diameter pick up at tool location. Less than 4" will restrict air flow into collector and will increase filter maintenance, If there is not enough air entry in system, open more blast gates.
 - Make sure clamp around cyclone is tight and sealed with silicone.

Excessive Vibration

Caused By:

- Loose mounting bolts.
- Excessive system pressure or restriction of air due to closed blast gates.
- Accumulation of foreign material on the fan wheel.
- Inadequate support structure.

X. Fire Hazards - Read Before Installing and Operating

Oneida Collectors are designed for WOOD DUST only!!

Wood shaping and cutting processes generate wood chips, shavings, and dust. These materials are considered combustible. Air borne wood dust below 420 microns in size (.017 of an inch) in certain concentration ranges when ignited can deflagrate (burn quickly).

An ignition source such as a spark or ember can ignite a dust mixture resulting in an expanding flame front which can cause an explosion if tightly contained. A disturbance that raises a cloud of accumulated fine dust can raise additional dust clouds, which can cause a series of explosions that can level an entire building. *Until this type of fire has been witnessed, it is difficult to believe the devastation.*

This type of fire is rare but worth safeguarding against.

The best way to avoid a wood shop fire is to keep the shop clean. A shop ankle deep in dust with layers of fine dust everywhere is an accident waiting to happen. A good dust collection system reduces overall fire hazards but also adds new concerns. A fire hazard is still present. Combustible material is now in the dust collector and storage container.

The following points are worth heeding:

- It is the buyer's responsibility to follow all applicable federal, state, local, OSHA, NFPA, or authorities having jurisdiction codes and regulations when installing and operating this dust collector.
- Fire marshals may want the unit located outside of the building. If the collector is located inside the facility, controls such as spark detection, suppression, or explosion venting may be required.
- Most local jurisdictions consult or adopt NFPA (National Fire Protection Agency) codes. However, other codes may apply. Local codes may vary from jurisdiction to jurisdiction.
- NFPA 664 Code book, "Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities", applies to woodworking operations that occupy areas of more than 5,000 sq. ft. or to areas where dust producing equipment requires an aggregate dust collection flow rate of more than 1500 cfm (cubic feet per minute). This exempts some small operators from the NFPA code 664, but other codes may apply in your jurisdiction. Consult your local Fire Marshall for help. Additional information can be found in NFPA Code Book 664.

The customer assumes the responsibility for contacting their insurance underwriter with regard to specific application requirements of explosion venting or if additional fire protection and safety equipment may be required.

Do not use this product to collect other types of dust or flammable vapors.

Fire or explosion may occur!

- Never collect sparks from a bench grinder into a wood dust collector.
- Never introduce sparks or sources of ignition into the dust collector.
- Personnel should keep at least 20 feet away from unit.
- Check dust bin frequently and before leaving the shop for smoldering material.

Keep portable Fire Extinguishers handy.

- The ABC type (dry chemical) is generally a good choice for small wood shops. Additional information on portable extinguishers can be found in NFPA 10 (Standards for Portable Fire Extinguishers).
- Be especially careful with sanding units. They can produce concentrations of dust in the combustible range. Make certain enough air volume is at the suction point to capture all the particulate generated.
- This high air volume will dilute the mixture below the lower limit of flammability. Be careful not to generate sparks into the sanding dust.
- Empty dust bin and clean filter often, especially when sanding.
- Don't overload woodworking equipment, especially sanders. Excessive frictional heat can spontaneously ignite dust.

Sparks can be generated in several ways:

- High-speed sanders and abrasive planers may strike foreign material.
- Saws and edgers may strike foreign material and create a red hot metal fragment.
- Knots in hardwood can create frictional sparks.
- Tramp metal when drawn into the collector can spark against ductwork.
- Check wood stock for old nails and screws which can create red hot metal fragments.
- Avoid using excessively large wood waste storage bins.
- Always check storage bins for smoldering material before leaving for the day.
- Electrically ground all equipment and ducting. Static sparks can ignite wood dust. (Avoid using PVC drainpipe).
- Don't allow accumulation of layers of fine dust on horizontal surfaces. (Especially overhead lights, electrical boxes, and fuse panels which can ignite dust).

How to Order

► **Phone - 1.800.732.4065 Toll-Free**
Our hours are Monday - Friday 8:30am - 5:00pm EST

► **Internet - www.oneida-air.com**
You can shop on our online web store 24 hours a day.
E-mail us at: info@oneida-air.com.

► **Mail - Oneida Air Systems, Inc. 1001 W. Fayette St., Syracuse, NY 13204**
You can mail in your order and we will send you back a confirmation by e-mail, fax or mail. Be sure to include your name and a daytime phone number.

► **Fax - 1. 315.476.5044**
You can fax your order in anytime and we will send you back a confirmation by e-mail, fax or mail. Be sure to include your name and a daytime phone number

Methods of Payment



Checks, Money Orders or C.O.D.

Terms and Conditions / Shipping

Oneida tries to ship orders out in a timely manner, however sometimes delays and back orders are inevitable. Oneida will not be held responsible or liable for these conditions or the way they may effect your production. Back orders will be shipped when they are available. When orders are shipped UPS, UPS will notify you by e-mail. If shipped by Common Carrier, you can arrange for the trucking company to notify you and make arrangements for delivery. Shipping method is determined by Oneida Air Systems and is dependent upon material to be shipped and destination. You are not charged until your order is shipped.

► Checking in Order

Please look over the shipped order very carefully in the presence of the delivery person for damage or incomplete shipment before signing the delivery receipt. Please note any tears or irregularities in shipping packaging, however slight, on the shipping delivery receipt. This could be an indication of extensive concealed damage. The shipping company will not take responsibility if the damage is not noted on the delivery receipt. In the event of shipping damage, call OAS Customer Service immediately at 1.800.732.4065 so we can expedite replacements. Please check in all parts within 3 days from receiving order. Notify OAS immediately of any missing or incorrect parts. OAS does not accept any claims for damage or shortage after 3 days from date of delivery.

► Limited Warranty

Oneida Air Systems™ warrants the products manufactured by Oneida Air Systems, for a period of 1 or more years depending on the product, to the original purchaser from the date of purchase unless otherwise specified. Purchaser is responsible for returning warranty items to OAS at their expense. All parts must be returned with an OAS provided Returned Material Authorization Number (RMA#). Any shipment without an RMA will be refused. Items not manufactured by Oneida Air Systems are limited to their own manufacturer's warranties. All electrical items such as magnetic starters, remotes, sensors, pumps and accessories are limited to 90 days. Oneida Air Systems warrants that the product will be free from defects in materials and workmanship. This warranty does not apply to defects due directly or indirectly to misuse, negligence, accidents, abuse, repairs, alterations, improper wiring or lack of maintenance. This is Oneida Air Systems sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. Oneida Air Systems does not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Oneida Air Systems' liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Oneida Air Systems shall be tried in the State of New York, County of Onondaga.

ONEIDA AIR SYSTEMS SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY OR FOR INCIDENTAL, AND CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCT.

Safety Warning - Please Read

Before Purchasing or Installing a dust collection system the buyer is cautioned to do so in accordance with prescribed Federal, State, Local, OSHA, NFPA, and any other applicable codes or regulations relating to the type of dust(s) you are collecting.

SOME TYPES OF DUST UNDER CERTAIN CONDITIONS HAVE THE POTENTIAL TO BE EXPLOSIVE.

Oneida Air Systems is not responsible for how the dust collector is used or installed. Dusts with deflagration or explosion risks, such as wood dust, may require additional safety equipment including but not limited to; venting, spark detection, suppression systems, back draft dampers or may require installation in an outside location or in a protected area away from personnel. The customer assumes the responsibility for contacting their insurance underwriter with regard to specific engineering controls or application requirements. (We suggest you reference NFPA 664, 654 and 68 codes for more information) Oneida Air Dust Collection Systems may not be suitable for some applications and are not designed to be used in explosive atmospheres. **Oneida Air Systems equipment should only be installed and wired by a licensed electrician following all applicable local and national electrical codes.**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. Oneida Air Systems recommends using additional approved safety equipment such as an approved OSHA and NIOSH dust mask or respirator.

Oneida Air Systems makes every effort to accurately represent our products, specifications and prices; however Oneida Air Systems reserves the right to make changes to products and prices at any time. As a manufacturer, Oneida Air Systems reserves the right to change product designs and specifications at any time.

► Delivery Risk of Loss

Products will be shipped to Buyer's single destination. Title and risk of loss shall pass to the Buyer upon delivery to such destination. Buyer pays transportation expenses. Dates of shipment are advisory and Oneida Air Systems will make reasonable efforts to ship on or before the date states for shipment, however, Oneida Air Systems shall not incur any liability for failure to ship on that date.

► Returned Goods Policy

Buyer must inform Oneida Air Systems of any shortage or damage, by so noting in writing, on the freight delivery bill prior to signing to indicate receipt of shipment. All claims covered under the limited warranty, are subject to inspection and investigation by Oneida Air Systems. Oneida Air Systems reserves the right to inspect and investigate all returned products before Buyer's claim is settled. All products returned for a refund must be unused and resalable and purchased within the last 30 days. There are no refunds on flex hose or custom made components. There will be a 25% restocking fee applied to any returned items. Buyer must call and obtain a Return Material Authorization Number (RMA #) prior to making a return. All merchandise must be shipped to us prepaid.

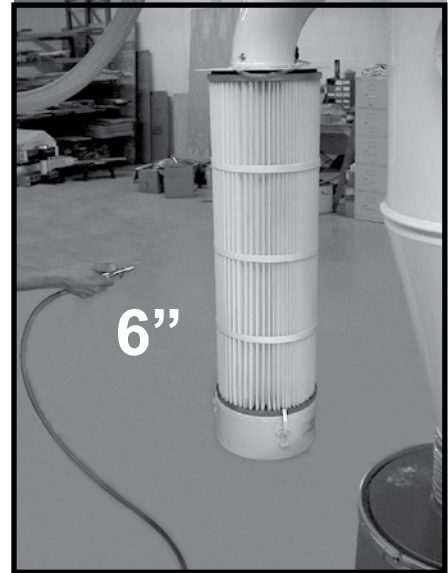
XIV. Directions for Cleaning the Filter

All steps should be done with a dust mask and eye protection. Proper filter cleaning should not be neglected. A dirty filter can affect dust collector operation and filter life.

1. *Compressed air from outside.*

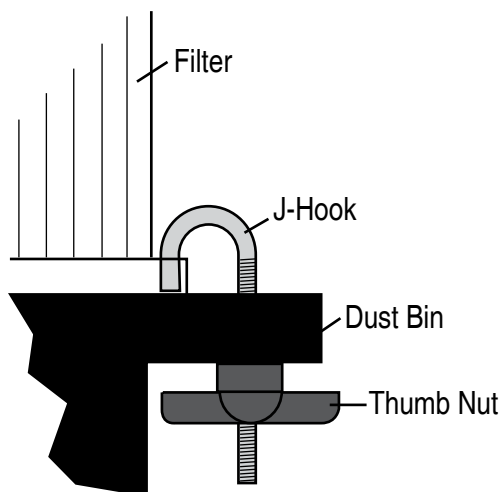
Blast air along pleats of the filter at about a 20 degree angle. Blast air out and away from you or anyone in the general area. Keep air nozzle at least 6" from filter. Closer blasts may damage material. This operation should be done with filter on the unit. Dust is trapped inside filter so it will not make a mess.

Filter must be cleaned regularly or filter damage may result. If gauge reaches 3, it is time to clean your filter. Never allow gauge to reach 5. You could destroy your filter. See page 16.

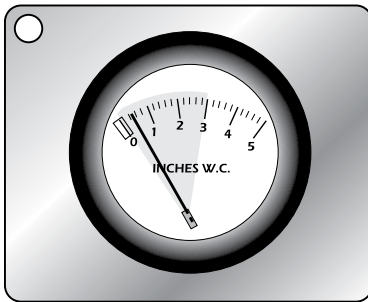


2. *Empty Dust Bin.*

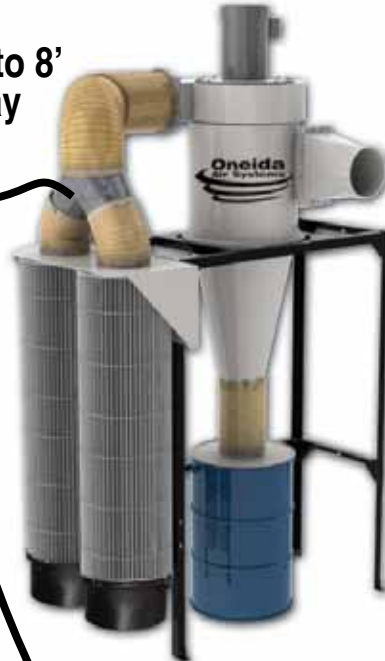
Wait a few minutes for internal dust to settle then unscrew thumb nuts from J-Hooks and remove dust bin. Empty dust carefully. Replace dust bin. Do not over tighten thumb nuts.



XV. Filter Efficiency Gauge Mounting Instructions



Up to 8'
away



Mounting Instructions

1. Select a location free from excessive vibration and where ambient temperature is between 20 F to 120 F (-6.7 C to 49 C). You can mount gauge up to 8' away from static pressure tube. Gauge bracket can be mounted to stand gusset for easy reading.
2. Mount brass static tube in plenum with tip pointed into air stream. Use included washers and nut as shown in drawings. Refer to the drawings for location of brass static pressure tube. Use 13/32" drill bit for hole.
3. Put gauge through supplied mounting plate with pre-cut 2 5/8" hole. Put the two bolts from gauge box through front of gauge. Put metal brace from gauge box against plate back with gauge bolts through brace to hold gauge tight against plate. Put supplied nuts from gauge box on bolts and tighten.
4. Mount plate with gauge to appropriate surface. If mounting to stand, user must drill a hole and supply hardware attachment. Connect clear tubing from brass static pressure tube to port labeled "+" on the back of the pressure gauge. Make sure tubing is not crushed or kinked along its entire length. Cut shorter if necessary.

OR

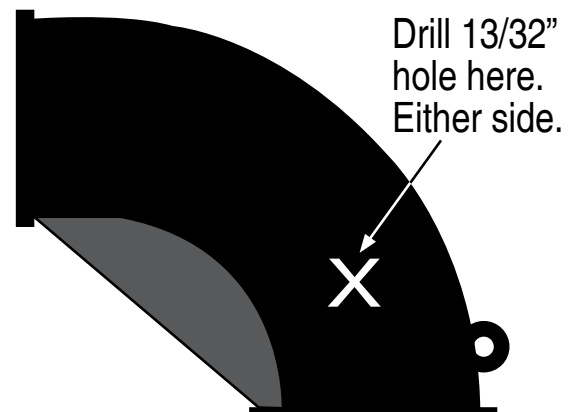
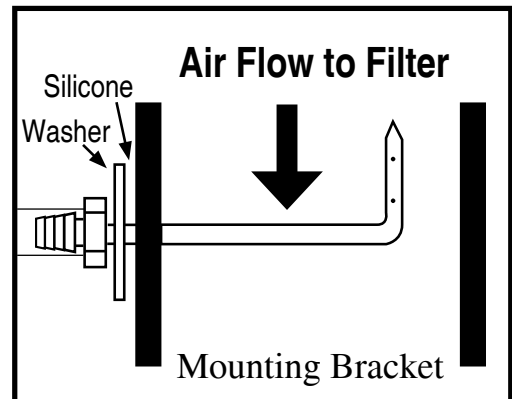
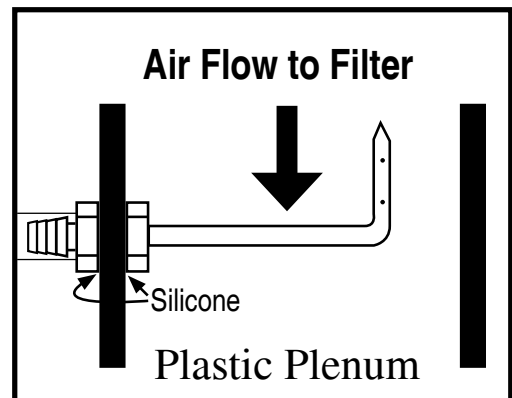
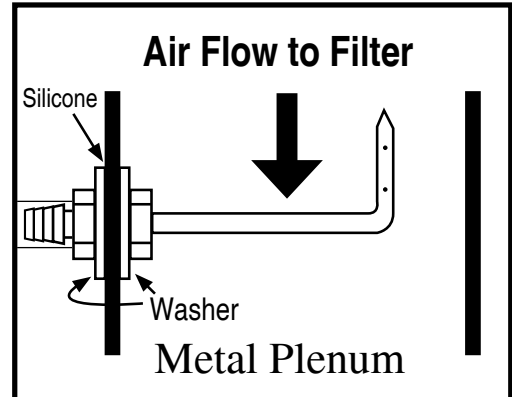


Before you insert brass static pressure tube, use a marker and mark top of brass nut where tube will be in the up position so when you position tube or tighten it, you'll know where tube is pointing.

Gauge Reading Instructions

1. Gauge may need to be zeroed. Follow the instructions provided with pressure gauge.
2. Take the initial reading with cleaned filter(s) and the typical number of blast gates open in normal operation.
3. Always read the gauge with the same number of gates open. The more gates open, the higher the pressure reading on the gauge.
4. When the gauge rises to 3", it's time to clean your filter(s).

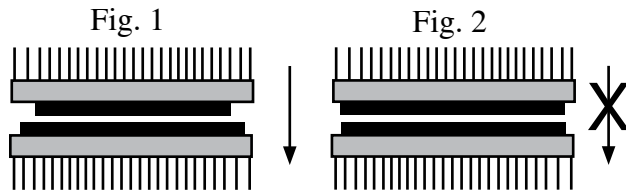
After many cleaning cycles, a filter's pressure will rise after each cleaning. An older filter does not get as clean as a new filter.



XVI. Directions for Filter Assembly / Internal Silencer

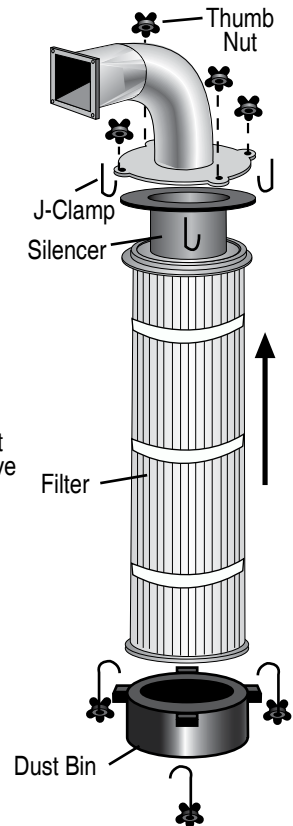
Filter Assembly *Silencer Included

1. Stack the smaller filter on top of the larger filter making sure that their gaskets fit within each other (Fig. 1). If they do not (Fig. 2), remove the lower gasket with a razor blade (Fig. 3), making sure to remove all residual gasket material. You should only have one gasket between the two filters.

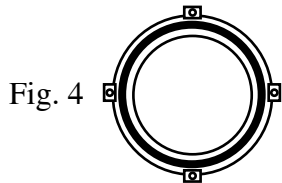


Once you assemble filter, it should be flipped so 39" filter is on top to attach to plenum.

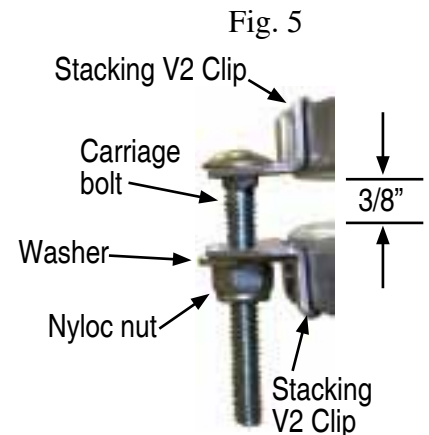
ATTENTION!
Over-tightening can damage the filter and uneven tightening can cause air leakage.



2. Assemble the four sets of clamps as shown in the diagram below. Put one clamp on each side of the filter, spacing them evenly around the filter. (Fig. 4)



3. Gently tighten the clamps to draw the filters together so the gasket is evenly compressed and there is a 3/8" gap between the filter flanges (Fig. 5). Finish tightening the clamps opposite one another like you would a car tire. Gasket compression must be constant and even. Tighten just until the filters are firmly attached to each other and evenly sealed. **Over-tightening can damage the filter and uneven tightening can cause air leakage.**



Silencer easily drops into Filter. Hold filter up to Flange Plate and clamp.

Filter Grounding Wire

Attach the alligator clip on the green ground wire from the motor to the filter cage as shown in photo. Tape the loose ring terminal end to the wire or connect it to one of the filter's J- hooks.



XVII. Fan Motor Lubrication

Per Baldor specifications, their 2 pole motors (3600 RPM) motors are to be relubricated **every 5500 hours**.

Table 1 - Service Conditions

Severity of Service	Ambient Temperature Maximum	Atmospheric Contamination	Type of Bearing
Standard	40° C	Clean, Little Corrosion	Deep Groove Ball Bearing
Severe	50° C	Moderate dirt, Corrosion	Ball Thrust, Roller
Extreme	>50° C* or Class H Insulation	Severe dirt, Abrasive dust, Corrosion	All Bearings
Low Temperature	<-30° C**		

* Special high temperature grease is recommended.

** Special low temperature grease is recommended.

Table 2 - Lubrication Interval Multiplier

Severity of Service	Multiplier
Standard	1.0
Severe	0.5
Extreme	0.1
Low Temperature	1.0

Per Baldor specifications, add .30 ounces (8.4 grams) of Mobil Polyrex grease by weight or .6 cubic inches (2 teaspoons) of Mobil Polyrex grease by volume.

Procedure

Clean the grease fitting (or area around grease hole, if equipped with slotted grease screws). If motor has a purge plug, remove it. Motors can be regreased while stopped (at less than 80° C) or running. Apply grease gun to fitting (or grease hole). Too much grease or injecting grease too quickly can cause premature bearing failure. Slowly apply the recommended amount of grease, taking 1 minute or so to apply. Operate motor for 20 minutes, reinstall purge plug if previously removed. Caution: Keep grease clean. Mixing dissimilar grease is not recommended.

XVIII. Supplemental Instructions for Magnetic Motor Starters with Oneida Air Systems Dust Collectors

Please see complete manufacturer instructions for more information.

This supplement is designed to aid Oneida Air Systems customers with frequently asked questions.

You must have this product installed by a qualified and licensed electrician.

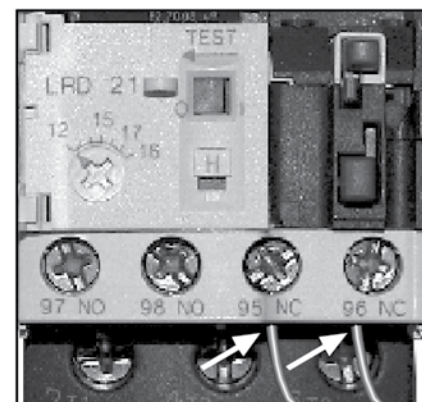
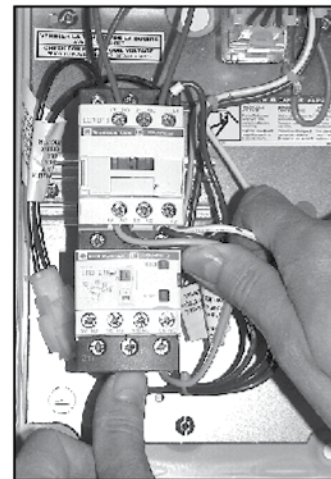
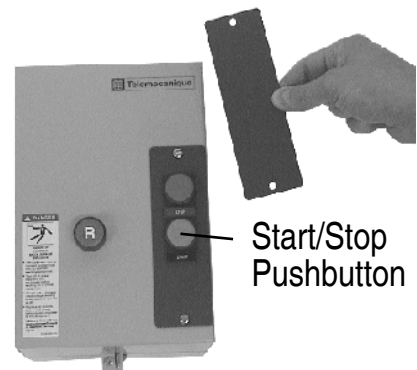
***Improper installation is very dangerous and will void your warranty.
Follow all local & national electrical codes when installing this product.***

This starter can be used in single or 3 phase applications. When used in 1 phase it requires a jumper wire that connects T2 and L3. (See attached wiring diagram.) This “tricks” the overload into thinking it has 3 phase power. This jumper must be installed by a licensed electrician. ***The jumper is not required if you are using 3 phase power.***

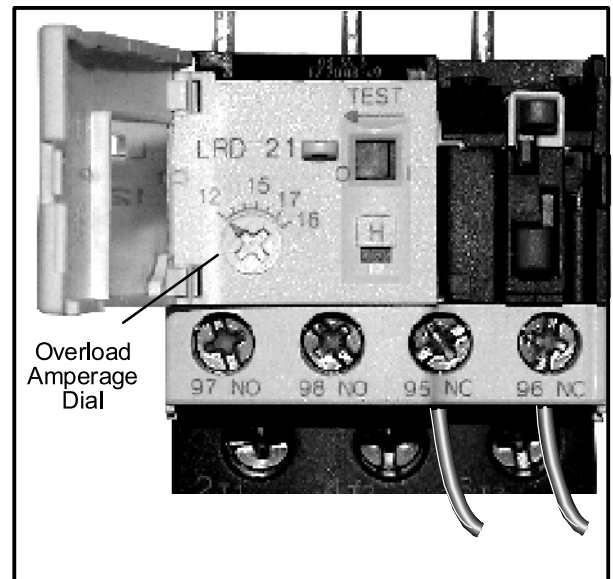
Important!

The gauge of the Jumper wire must match the gauge of the wire bringing power to the motor through the Starter.

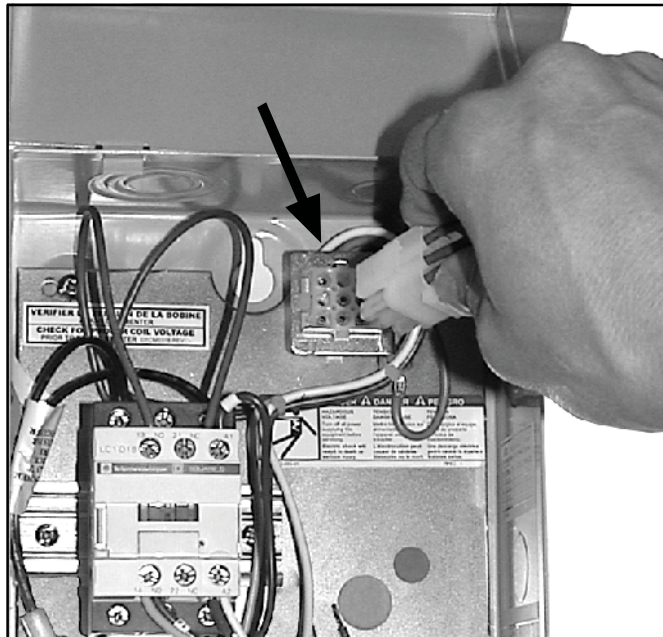
- ▶ Remove the blank plate and install the Start / Stop Pushbutton into the starter cover.
- ▶ You must mount the Overload Protector to the contactor. The Overload comes in the small white box. It mounts to the three terminals at the bottom of the contractor. ***See the complete instructions for more information.***
- ▶ After mounting the overload, connect (2) brown wires marked 95 & 96 to their respective numbered terminals on the overload.



- Open access cover on the overload, then set the overload amperage dial to match the FLA amperage of your motor. The FLA value can be found on your motor nameplate.



- Be sure you have the proper voltage available for your Starter's Power & Control Circuit (Control circuit controls Contactor Coil in Starter). Coil voltage is/can be independent from the line voltage that runs your motor. Customers may desire an alternative Contactor Coil voltage to connect a Starter to a low voltage control circuit. Most OAS starters are shipped with 240v coils.
- Plug the Start / Stop Push-Button Assembly into keyed receptacle. As shown below.)



- Run power to the starter and from the starter to your motor. See the manufacturer instructions for more details.
The Power Circuit connected to the Starter should be fed from a dedicated circuit breaker or disconnect with fuses. Don't connect any branch circuits to the Mag Starter Power Circuit is to be sized per Article 430.32 of the NEC.

*Use time delay fuses rated for motor circuits.

